

ADDENDUM NO. 2

February 25, 2013

RE: **Kitchen Improvements at Bancroft Elementary School**
700 North Lombard Street, Wilmington, Delaware 19801
for
Christina School District
700 North Lombard Street, Wilmington, Delaware 19801
EIA Project No. PP7279

FROM: EI Associates, Architects and Engineers
2001 North Front Street, Building 3
Harrisburg, PA 17102-2118
Telephone: (717) 233-4556 x1015 E-mail: ahollinger@eiassoc.com

TO: Prospective Bidders

This Addendum shall be incorporated into the Contract Documents and shall take precedence over any instructions that conflict therein. All items contained herein shall be considered in preparation of your proposal for the subject Project. Acknowledge receipt of this Addendum in the space provided on your Form of Proposal. Failure to do so may subject Bidder to disqualification.

This Addendum consists of 5 pages, plus the following accompanying documents:

Project Manual Documents:

Section 012300 - Two 8-1/2 x 11 drawings pertaining to Alternate No. 1:
Polar Leasing – Plan, Section , Elevation of temporary walk-in unit.
Polar Leasing – Electrical wiring instructions for temporary unit.
Section 087100 “Door Hardware” (3 pages)
Section 114000 “Food Service Equipment,” revised 2-25-2013 (7 pages)
Section 114000 – Bally Detail Sheets (8 pages)

Supplemental Drawings:

SKFS-1 Foodservice Equip. Utility Schedule Revisions (ref. Dwg. FS-1.7); dated 2-20-2013
SKFS-2 Mounting Detail Wall Mount Condenser (ref. Dwg. FS-1.5); dated 2-20-2013

Full Size Drawings:

FS-1.6 Foodservice Equipment Refrigeration Schedule – revised 2-20-2013

CHANGES TO BIDDING REQUIREMENTS:

- 2.1 Bid Schedule (p. BS-1): Under “Bids Due,” revise the following:
- A. Change the time bids are due for this project from 2:00 p.m. to **1:00 p.m.** The date remains unchanged (March 1, 2013).
 - B. The city and zip code are incorrect; change the line, “Newark, DE 19711,” to “Bear, DE 19701.” The city and zip code are correctly shown for the Eden Support Center in the Instructions to Bidders and Bid Form.

CHANGES TO CONTRACTING REQUIREMENTS:

2.2 Supplementary Conditions; Article 8; paragraph E (p. SC-4): Add new subparagraphs as follow:

- (1) Provide all necessary measures to protect existing facilities-to-remain against damage from exposure to weather, construction activities or unauthorized access. Exact locations, dates of installation and removal, materials, configurations and other aspects of construction of such partitions shall be subject to the review and approval of Owner.
- (2) Where portions of roofing system or exterior walls or doors are cut open or removed, thereby exposing the building interior, utilities, finishes, or other in-place work (new or existing) to the outside, provide temporary weather-tight enclosure that is also secure from intrusion by unauthorized persons.
- (3) On building interior, provide indoor air quality control by separating construction areas from existing kitchen areas-to-remain and other Owner-occupied areas at risk of being soiled or damaged due to construction work. Seal and isolate construction areas from adjoining finished or Owner-occupied areas in order to strictly limit airborne transmission of dust and fumes into such adjoining areas and to maintain them as clean and healthy indoor environments.
 - a. Kitchen areas in Bancroft E.S. will be in use during the summer.
 - b. At a minimum, construct interior temporary partitions from floor to deck above with 3-5/8-inch metal stud or 2 x 4 fire-retardant-treated wood stud framing and minimum 6-mil polyethylene sheet attached on one side. Seal barrier at all openings, gaps and joints to prevent dirt and dust transmission. Provide with temporary “doorways” of acceptable materials where necessary for construction access, Owner access, or emergency egress. Provide weatherstripping or other suitable dust barrier on doorways. Provide walk-off mats at each doorway through temporary partitions.
 - c. Examine perimeter surfaces of work area for openings, penetrations and joints. Provide suitable temporary or permanent (as applicable) closure of such openings.
 - d. Seal off permanent HVAC equipment inlets/outlets, return air ducts, air transfer ducts, or inactive ducts that remain in the work area, after verifying that air flow is otherwise provided to active systems serving Owner-occupied areas.
 5. Provide negative air pressure in work areas by installing temporary ventilation system with adequate makeup air and fans to exhaust contaminated air to the exterior away from outdoor air intakes.
- (4) Immediately remedy breaches in the isolation facilities and clean-up surrounding occupied or finished areas that become contaminated.

2.3 Supplementary Conditions; Article 8 (p. SC-5): Add new paragraphs G & H as follow:

- G. Construction materials shall be secured, protected, and suitably stored.
- H. School District Summer Work Schedule: After the students leave school in June, the District will be operating on a summer schedule. The buildings will be open

4 days a week (Monday to Thursday), from 6:30 a.m. to 5:00 p.m. Contractor shall perform its work on site on the same days and hours that the District has the building open; however, the District will work with the Contractor to open the building on Fridays if necessary to complete the project on time. Refer also to Section 011000, paragraph 1.11-B.

CHANGES TO SPECIFICATIONS:

2.4 Section 012300; Paragraph 3.1-A, Alternate No. 1 (p. 012300-2): Revise to read:

“Alternate No. 1 (Temporary Walk-In Refrigeration Unit at Sarah Pyle Academy): Provide and maintain temporary walk-in refrigeration unit for Owner’s use, starting no later than June 7, 2013 (approximate end of the current school term) and ending on August 15, 2013 or when the new Bancroft permanent walk-in units are completed and accepted by Owner, whichever is later. Locate unit at the Sarah Pyle Academy, 501 North Lombard Street, Wilmington, DE 19801. Deliver and place unit sufficiently in advance of June 7 to allow Owner time to connect power per Polar Leasing Co.’s instructions, and for Polar Leasing Co. to start up, test and demonstrate unit to Owner. Upon termination of use and disconnection of power by Owner, remove unit and restore site. Temporary unit shall conform to the following:

Polar Leasing Company, www.polarleasing.com

Model: L820 (refer also to two 8-1/2 x 11 Polar Leasing Co. drawings, copies of which accompany this addendum; which shall be attached at the end of this Section 012300)

Size: 8’ x 20’ Low Profile

Electrical Requirements: 208-230/Single Phase Connection, 30 amp (verify amp draw); connection & disconnection to be completed by the Christina SD Maintenance Dept.

Walk-In refrigerator rentals pre-set for 35°F (2°C) operation.

Pre-wired, pre-assembled, and ready to operate. Just make an electrical connection.

Electric-powered – no fumes, fuel bills, or diesel engine noise.

Placed in the concrete or asphalt paved area as directed by the Christina SD Food Service Director.

Seamless fiberglass construction is immune to heat, cold, and bad weather.

Placed at ground level for easy access – no ramp necessary.

Maintenance by lease company to be included. Review maintenance procedures with Owner.

Additional features shall include:

- Heavy duty non-skid floor
- Lockable door latch
- Self-closing hinges
- Hasp lock (ext. door)
- Safety release handle
- Heated door jamb
- Magnetic gasket
- Door closer
- Sweep seal
- Low ambient controls
- Defrost timer
- Heated relief port
- Light switch/pilot light
- Rain cap exterior doors
- Remote thermometer
- Interior lighting

- Crowned roof
 - Shelving (see lease drawing from Polar Leasing Co.)
 - NSF,UL Approved Unit shelving and compressor/condenser
- 2.5 Section 033053; Paragraph 3.10-A (p. 033053-6): Revise to read, “Testing Agency: Owner will engage and pay a qualified testing agency to perform tests and inspections. Contractor to coordinate and schedule testing agency at the appropriate times. Testing agency is to report inspection results promptly and in writing to Owner, Contractor, and Architect. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.”
- 2.6 Section 042000; Subparagraph 3.12-A.1 (p. 042000-9): Revise to read, “Except as indicated otherwise, Owner will engage and pay a qualified independent testing and inspecting agency to perform indicated field tests and inspections and to prepare test reports. Contractor to coordinate and schedule testing agency at the appropriate times.”
- 2.7 Division 08: Add Door Section 087100 “Door Hardware” copy of which accompanies this addendum.
- 2.8 Section 096517: Two authorized installers for Altro flooring are:
Connolly Floors, tel. 302- 996-9470, attn: Mike Connolly
Tri-State, tel. 302-654-8193, attn: Dave Michaloski
- 2.9 Section 114000: Void the original Section in the Project Manual and replace with revised Section 114000, copy of which accompanies this addendum. Add 8 pages of Bally Detail Sheets, copies of which accompany this addendum, to the end of this Section as additional information.

CHANGES TO DRAWINGS:

- 2.10 Drawing FS-1.5:
- A. Walk-In Insulated Floor Depression Details 7.06, 7.06.1, 7.06.2, 7.06.3 and 7.06.4: Floor depression indicated should be 6" not 8" (verify with mfr), and field-applied floor finish inside walk-ins is to be sheet vinyl (Section 096517), not quarry tile.
 - B. Delete Details 17.1 thru 17.7.
 - C. Add Wall Mounted Compressor Detail as shown on supplemental Drawing SKFS-2, copy of which accompanies this addendum.
- 2.11 Drawing FS-1.6: Delete Drawing as originally included in bid set and replace with revised Drawing FS-1.6, copy of which accompanies this addendum. On the “Section Thru Entrance Door” on this new drawing, delete note referring to “Epoxy Flooring by Others.”
- 2.12 Drawing FS-1.7; Foodservice Equipment Utility Load Schedule: Revise electrical characteristics as shown on supplemental Drawing SKFS-1, copy of which accompanies this addendum.
- 2.13 Drawings A1, S2.1 and FS-drawings: Make minor adjustments to dimensions shown for construction to accommodate revised dimensions of the new walk-in refrigerator and freezer units as indicated elsewhere in this addendum by changes to specific FS-drawings and Section 114000 specifications.

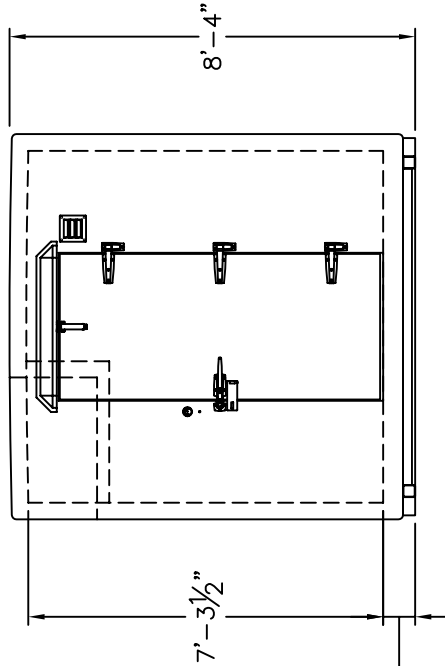
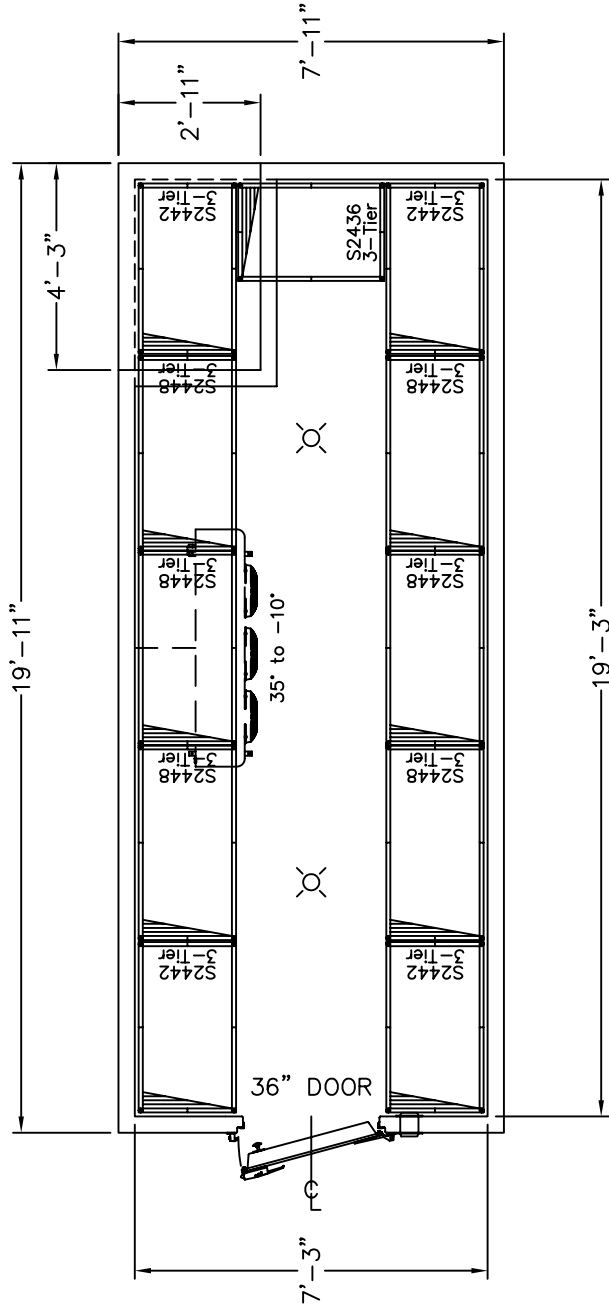
- 2.14 Drawing S2.1; Structural Notes – Concrete Slabs on Grade: In Note 1, add the following: “Prior to concrete placement, excavate, fill, and re-work subgrade soil as necessary for new drainage course and recessed slab. Compact subgrade to not less than 98 percent of maximum dry unit weight according to ASTM D 698. Coordinate and schedule Geotechnical Engineer (engaged by Owner) to test subgrade to verify acceptable compaction density. Place and compact new 4" drainage fill course of AASHTO #57 washed crushed stone, or crushed or uncrushed gravel.”
- 2.15 Drawing S2.1; Foundation Plan 1/S2.1: In note regarding 4" slab on grade, add the word “BARRIER” after the word “VAPOR.”
- 2.16 Electrical Drawings: Clarification: Electrical – General Notes and Conditions: Running exposed surface mounted conduit to new kitchen equipment shall be acceptable only in cases where it’s not feasible to run inside block due to the block being filled with concrete or structural steel makes it impossible. Surface mounted conduit shall be installed in a workman like manner at right angles to the existing floor and ceilings and meets all National Electrical Code requirements. Where new circuit wiring is required to be run from existing panels that are recessed in masonry wall, the wiring shall be run in existing conduits that provide access to the panel through the masonry wall. This may require the installation of new wiring in a conduit with existing wiring. Where new wiring is to be installed in a conduit with existing wiring, the National Electrical Code requirements for number of wires in a conduit shall be followed.
- 2.17 Drawing E1: Make the following revisions as shown on supplemental Drawing ESK-1, copy of which accompanies this addendum:
- A. Partial Floor Plan 2 – Construction: Add circuit for additional evaporator coil in walk-in refrigerator.
 - B. Existing Power Panel Schedule: Add circuit and revise others.

SUPPLEMENTAL INFORMATION:

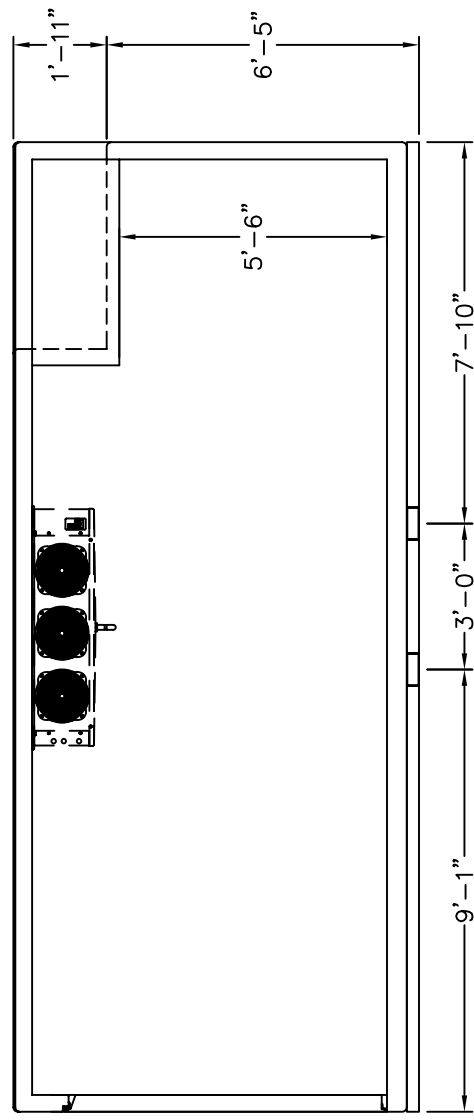
- 2.18 Bidders are reminded that patching and repair requirements (specified in Sections 017300 and 024119), following selective demolition and other cutting operations, include matching of new, patched finishes to existing adjoining undisturbed finishes. Not all finishes required have a specification section. It is bidders’ responsibility to field verify such finishes.
- 2.19 It shall be assumed that new concrete slab substrate may be too ‘green’ to receive direct application of new/patched finishes; accordingly, include floor finish manufacturer’s recommended seal coating for ‘green’ concrete to reduce moisture vapor emission rate to acceptable level for installation of its flooring.

END OF ADDENDUM

COPELAND VJAF-022Z-CFV-001
 RUSSELL HTE36-140B-D



ELEVATION VIEW



SECTION VIEW

FORK LIFT FRAME

Polar Leasing

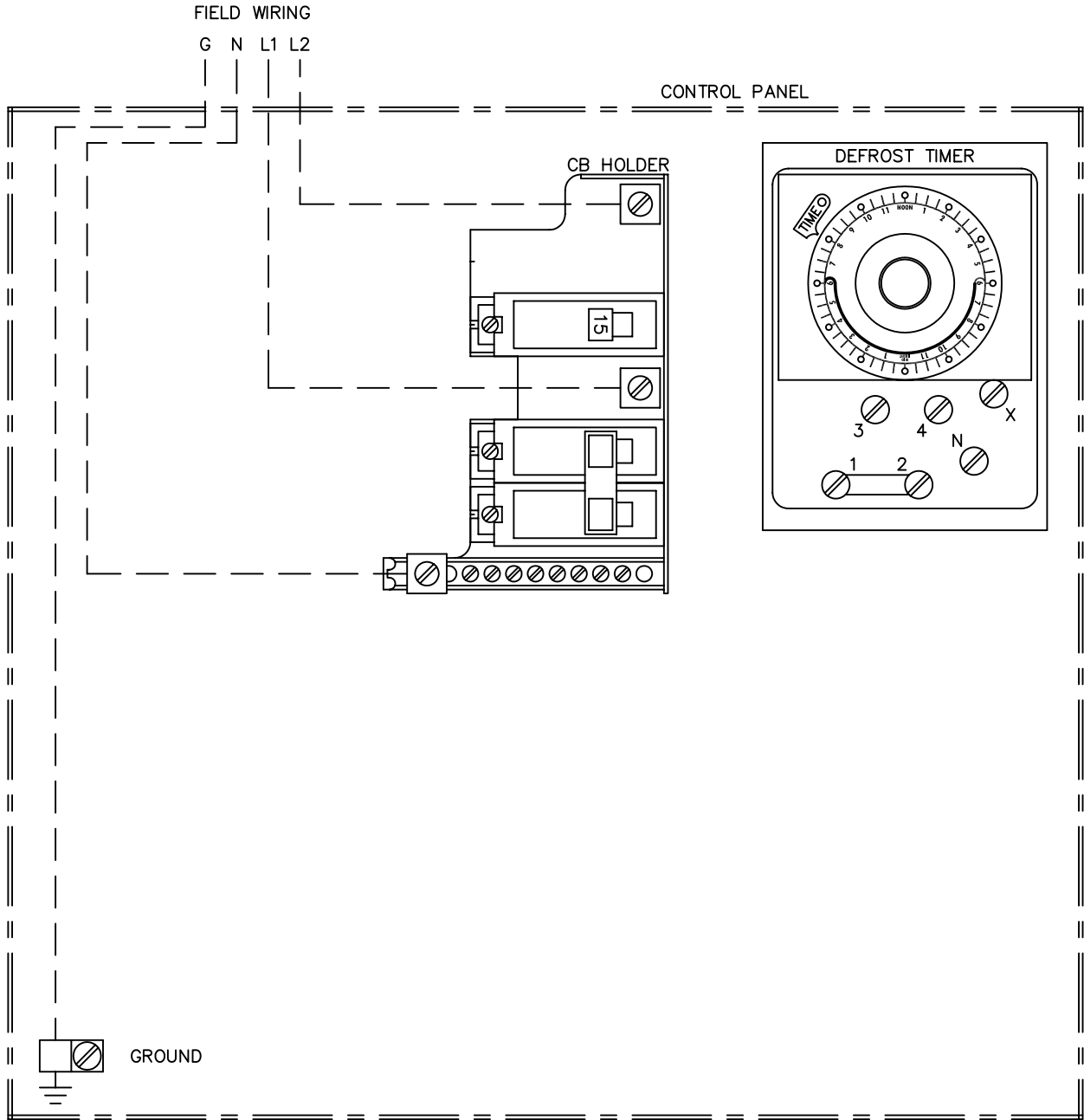
DRAWN BY: MD Leppek	MODEL NO.: L820	SCALE: 1/4" = 1'-0"	DATE: 1-29-08
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DRAWING NAME:
L820 G



THE REFRIGERATION SYSTEM SHOWN IS DESIGNED TO MAINTAIN INDICATED TEMPERATURE IF PRODUCT ENTERS WITHIN 10°F OF FINAL HOLDING TEMPERATURE. PLEASE CONTACT YOUR SALES REP IF INCOMING PRODUCT WILL BE ENTERING AT HIGHER TEMPERATURES.

TYPICAL WIRE CONNECTIONS



WIRING INSTRUCTIONS

CONTROL PANEL IS LOCATED AT THE CONDENSING UNIT ON TOP OF THE WALK-IN. A HOLE MAY BE DRILLED THRU THE FIBERGLASS CONDENSING UNIT COVER FOR INCOMING POWER. ELECTRICAL HOOK-UP MUST COMPLY WITH THE NATIONAL ELECTRICAL CODE

WALK-IN TYPE: Cooler or Freezer		COMPRESSOR TYPE:	
VOLTAGE: 208-230	PHASE: Single	CYCLES: 60 hz	HORSEPOWER: 1/2 to 2
DRAWN BY: MD Leppke	MODEL NO.:	SCALE: None	DATE: 3-13-03
DRAWING NAME: Single Phase Connections			

SECTION 087100 - DOOR HARDWARE

PART-1 GENERAL

1.01 Summary:

- A. This Section includes door hardware, and all associated parts required to complete the Work.
- B. Accessories and other items of hardware, as may be required, but not specifically mentioned, shall be provided, be suitable to the service intended, and be of the same quality, weight, and finish as that mentioned for similar parts adjacent thereto.
- C. Should it be determined that hardware, as specified in certain locations, due to detail or size of members to which the hardware is to be applied, is unsuitable, provide, in lieu thereof, hardware of the proper type. Such hardware shall be similar in operation and equivalent to the type specified, sizes specified being considered the minimum.
- D. Refer to Drawings and Door Schedule in conjunction with this Section.
- F. Related work specified in other Sections:
 - 1. Division 8 Section "Hollow Metal Doors and Frames."

1.02 Submittals:

- A. Product Data: Include installation details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Proposed Finish Hardware Schedule, in "vertical" format.
 - 1. No hardware shall be ordered until final acceptance from the Architect.
 - 2. The final Hardware Schedule shall coordinate hardware with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of hardware.
 - 3. Content: Submit schedule in vertical format. Include the following information:
 - a. Type, style, function, size, label, hand, degree of opening and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of each door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.

1.03 Quality Assurance:

- A. Code Requirements: Furnish and install hardware in accordance with applicable requirements of Code authorities having jurisdiction, Underwriters' Laboratories (UL), and the Americans with Disabilities Act (ADA), notwithstanding any real or apparent conflict therewith in these Specifications.

1.04 Delivery and Storage:

- A. Deliver hardware to the Contractor at the building site properly wrapped with a protective cover, complete with all required screws, bolts, and other hardware required for installation; each set or piece clearly labeled and identified for location and application to the correct opening by set or item numbers corresponding to those used in the Hardware and Door Schedules.
- B. Contractor shall receive and check hardware against delivery receipts. Provide a safe, dry, and locked storage area for hardware until installation is complete. Upon completion of Project, turn over all keys, properly tagged, to Owner.

1.05 Coordination:

- A. Templates: Hardware supplier shall furnish all necessary template information or hardware, as required, to all firms requesting same, in order that they may make proper provisions for the accurate setting and fitting of hardware items as it applies to their work.
- B. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and full operation of door movement as shown.
- C. Coordinate with door and frame manufacturers for proper reinforcement and preparation to receive hardware. Unless indicated otherwise, doors shall be constructed and reinforced to enable hardware installation without through-bolts.

PART-2 PRODUCTS2.01 Hardware - Basic Requirements:

- A. Refer to Hardware Schedule in Part 3 for products.
- B. Keying & Cylinders: Provide hardware compatible with existing Bancroft ES cylinder cores (Schlage).
 - 1. Coordinate the keying and lock functions of all locks with the Owner.

PART-3 EXECUTION3.01 Hardware Installation:

- A. Prior to installing hardware, Installer shall examine all areas and conditions where hardware is to be installed, and shall notify Contractor, in writing, of any problems. The installing of hardware shall indicate acceptance of areas and conditions; Installer shall assume the responsibility for any unacceptable finished work.
- B. Install hardware in a workmanlike manner in strict accordance with the manufacturer's directions. Hardware shall be kept free from scratches, mortar, acid, and paint products. Damaged or lost hardware shall be replaced at the Contractor's expense. All wrapping furnished by the manufacturer for knobs, handles, pulls, etc. shall be reapplied to the hardware as it is installed, and shall remain thereon until Substantial Completion.

3.02 Hardware Schedule:

- A. The following Schedule is included as a guide in establishing the manufacturer, brand, quality, type, and function of hardware required for each opening. Quantities listed under each Hardware Set are for each opening, whether a pair of doors or a single door.
- B. Furnish UL-listed hardware with door closers for all labeled doors, if not specified.

HARDWARE SET #1 (Bancroft)				
3	Hinges	TA2714 4-1/2 X 4-1/2	US26D	McKinney
1	Classroom Lock	ND70 RHO GMK	US26D	Schlage
1	Kick Plate	K1050 - 8" x 2" LDW 4BE	US32D	Rockwood
1	Mop Plate	K1050 - 4" x 2" LDW 4BE	US32D	Rockwood
1	Overhead Stop	10-X36	652	Rixson
3	Door Silencers	608 -OR- 609	GREY	Rockwood

END OF SECTION

SECTION 114000 - FOOD SERVICE EQUIPMENTPART-1 GENERAL1.01 Summary:

- A. This Section includes the furnishing and installation, by a Food Service Equipment Contractor (FSEC), of all items of food service equipment, with accessories and appurtenant parts required to provide a complete and operating food service system as shown and called for in the Drawings and Specifications, or reasonably inferable there from. All parts or appurtenances required to make a system or item complete and satisfactorily operative shall be provided, even though such part or appurtenance may not be specifically mentioned or shown. Work of this Section shall include all motor starters for other than fractional horsepower motors, connection terminals, controls and control wiring, overload protection, safety devices, and other equipment required by N.E.C., faucets, waste traps, escutcheons, and other appurtenances necessary for proper operation of the equipment.
- B. Items of equipment hereafter listed and described by a certain manufacturer's name and model designation shall, unless otherwise indicated, be furnished complete with all components, accessories, finishes, and other operational and construction features as are listed or indicated in the named manufacturer's specifications or catalog data, current at time of bidding, as "standard" or otherwise furnished with that particular model mentioned herein. Each item shall, in addition, be furnished with such optional accessories or special features as are further herein specified.
- C. Related Work By Others:
1. The Electrical Subcontractor shall provide electrical power supply for equipment to the locations shown on equipment rough-in drawings and make final connections to equipment terminal blocks or control box. Disconnect switches, or other protective devices and other electrical items not an integral part of the equipment, shall be furnished and installed by the Food Service Equipment Installer. All control wiring, whether controls are equipment mounted or remote, shall be the responsibility of the Contractor furnishing the food service equipment.
 2. The Plumbing Subcontractor will provide waste, and gas supply services to the locations shown on equipment rough-in drawings, and will make final connection of these services to faucet legs and trap tail-pieces provided by the Contractor furnishing the food service equipment.

1.02 Submittals:

- A. Coordination Drawings: After Award of Contract, submit to the Architect equipment rough-in coordination drawings. These drawings shall indicate, by dimension, the size and location of each service connection required (i.e., water, waste, gas, electric, etc.) to each piece of equipment. The Contractor shall be responsible for the size and location of these services installed in accordance with these drawings. These drawings shall be submitted to the Architect in at least eight copies; two copies, bearing Architect's acceptance, shall be furnished to each Contractor furnishing services to the equipment.

- B. Shop Drawings: Submit to Architect for review before any item of equipment is fabricated or purchased. Shop drawings or, in the case of purchased items, manufacturers' data sheets, shall describe, in detail, the size and type, construction details, gauge and finish of metals, service characteristics, capacities, fittings or accessories furnished, and other pertinent information for each item of equipment.

1.03 Quality Assurance:

- A. All materials shall be new and of first quality. All work shall be performed in accordance with the best practices and highest standards of the industry.
- B. All items of equipment shall be approved by the National Sanitation Foundation and meet the requirements of the pertinent State of Delaware agencies. All work shall be performed in accordance with all applicable state and local codes. All electrical items shall be UL-approved and meet the requirements of the National Electrical Code.
- C. The mention of a manufacturer's name or model number relative to certain pieces of equipment is intended to indicate the type, kind, or quality required for that specific item and shall not be construed to limit the work to that particular manufacturer mentioned. However, the Contractor shall not presume to furnish equipment other than that specified without the Architect's review and acceptance of such proposed substitution in accordance with Instructions to Bidders, Article "Product Substitutions."
- D. R-12 refrigerant shall not be used in any equipment items.

1.04 Warranty:

- A. The Food Service Equipment Contractor shall guarantee all items of equipment for a period of at least two years and shall repair or replace, to the Owner's satisfaction, any item showing failure or fault during this period, without cost to the Owner. Manufacturer's warranties, shall be assigned and delivered to the Owner.

PART-2 PRODUCTS

2.01 Schedule of Equipment:

- A. For location and identification purposes, item numbers preceding the item title, as specified herein, refer to the items used on the Kitchen Layout.
- B. Items specified herein in the singular reference shall be furnished in the quantities as shown on the Kitchen Layout or as hereinafter specified.
- C. Manufacturers: Equipment catalog model designation numbers of the manufacturers named herein are used to establish the model type, size, design, and quality features required for the various items of equipment included in this Section.

SPECIFICATIONS

FSEC IS RESPONSIBLE FOR ALL FINAL FIELD CONDITIONS (VERIFY ANY AND ALL OBSTRUCTIONS) AND OR DIMENSIONS. FSEC IS RESPONSIBLE FOR RUNNING INTER-CONNECTIONS (EVAP.COIL DRAINS LINES, HEAT TRACE TAPE ETC.)

FSEC RESPONSIBLE FOR RIGGING AND PLACEMENT (INCLUDING METALLIC ANCHORS IF NECESSARY) OF COMPRESSOR/CONDENSER. PRESSURE AND SUCTION LINES RAN AND SOLDERED BY FSEC. START UP BY FSEC.

FSEC TO PROVIDE 16 GAUGE #4 MILL FINISH STAINLESS STEEL VALANCE(S) TO COVER ALL OPEN AREAS OF WALK-IN-COMPLEX. THIS INCLUDES FINISHING TRIMS AS WELL.

FSEC TO FOLLOW WALL MOUNT INSTRUCTION/DETAIL SKFS-2 FOR BANCROFT SCHOOL ONLY.

REFER TO BALLY DETAIL SHEETS (8 pages) AT END OF THIS SECTION FOR ADDITIONAL INFORMATION.

Item 1.001 - WALK-IN-COOLER (+35) (1 REQ'D)

BANCROFT – 12-2723-0-1-JMH

INDOOR STRUCTURE:

NSF Approved

BALLY Prefabricated Exterior Dimensions:

19'-3" Length x 15' x 5" Width x **8'-10" Height Revised 2.20.2013**

2 Compartments with Floor

Ceiling: Single Span

Panel Thickness: 6" Exterior Vertical Used (6'-10") with 4" Partition, 6" Floor, 6" Ceiling

Details and Specifications:

Comments:

Cooler/Freezer with Floor

With Offset Notch

Base Finish:

Vertical and Ceiling Panels: Embossed Galvalume (26 GA)

Base Finish Interior Floor: Galvanized (16 GA)

Special Finishes:

Interior Verticals – Stainless Steel 22 Ga. (Smooth)

Interior Ceiling – Stainless Steel 22 Ga. (Smooth)

Exposed Ext. Verticals – Stainless Steel 22GAa. (Smooth)

Doors/Openings:

(1) 3'-6" x 6'-6" L/F Metal Capped Wood Framed Opening

(1) 36" x 78" Hinged Door in a 46" x 82" Panel

Doors Accessories:

(2) 4 1/2" Dial Type Thermometer w/ 5' Cap Tube

(1) DataHub System

(1) Foot Treadle

(2) Observation Window (14 x 24) Norfab w/ Aluminum Frame

(1) Super Door 36" Wide and Under, 36" High

Accessories and Extras:

- (2) Bally Standard Pressure Relief Port (< 400sq/ft)
- (1) Conduit to Top of Panel (Not including Plug)
- (1) J-Box & Conduit (Recept & Wiring by Others)
- (8) LED Kason 1810 48" w/ (2) Lamps
- (1) Extra Hinge on each Door (Total of 4)
- (1) Jamoclear Lamison 36" Door
- (24) L/F Stainless Steel (22Ga.) Capping – Ceiling
- (24) L/F Stainless Steel (22Ga.) Capping – Floor
- (1) Lot of 21" S/S Wire Cant. 5 Tier Shelves
- (1) Modularm Phone Dialer
- (1) Notch Ceiling Panel
- (1) Notch Floor Panel

Refrigeration:

- (1) Htd. & Insul Receiver (Below 10 Degrees) **0.5 – 3 HP**
- (1) Htd. & Insul Receiver (Below 10 Degrees) **+3 HP**
- (1) BQHA 010 E6 HT3AB **(208-230/3/60)** – Copeland Hermetic # RS70C1E
- (1) BQZA 035 L6 HT3AF **(208-230/3/60)** - Copeland Scroll # ZF11K4E
- (1) BLP 211-MA-S1BPE **11000 BTU 115/1/60** – Low Profile Evap. **(2)** Fans Air Defrost
- (1) BLP 314LE – S2BPE **14000 BTU 208/230/1/60** – Low Profile Evap. **(3)** Fans Elect Defrost
- (1) Sound Insulated Compt. **+3.5HP**
- (1) Sound Insulated Compt. **0.5-3HP**

Estimated Shipping:

Weight: 7,903.35

Destination: Wilmington, DE

Exclusions (Items Not Supplied by Bally):

Labor on Warranties
 Supervision
 Tubing, Wiring for Rfg. Equipment
 Compressor Rack
 Caulking and Sealants
 Closure Panel and Trim
 Sleeves, Penetrations, Escutcheon Plates
 Floor Insulation and Vapor Barrier

Bally Refrigerated Boxes, Inc. is compliant with Federal Energy Independence and Security Act of 2007 (Public Law 110-140) Title III; Section 312, regarding Walk-In Coolers and Walk-In Freezers.

Cancelled Orders:

Cancelled unshipped standard walk-ins will be charged a 30% restocking fee plus the cost of special panels. Cancelled refrigeration systems will be charged a 30% restocking fee and the cost of any freight accrued. Buy-out items will be charged a 25% restocking fee plus any freight accrued.

Agency Ratings: Bally units comply or surpass applicable Flame Spread-25, UL, UL 723, & NSF standards in a manner conforming to ASTM E-84, and Factory Mutual standards.

Quotation Limitations:

This quotation was based upon the specifications given to Bally which may possibly be incomplete. Bally is not responsible for items missing from the quotation due to incomplete or excluded items in the specifications received from the customer. The customer is responsible for reviewing the quotation for omissions or deviations from the specifications given to Bally. All portions of the quotation are subject to revision upon receipt of detailed specifications or if changes are made following the delivery of the original quotation.

Panel Construction: Bally Panels are manufactured with environmentally friendly HFC 245-FA polyurethane foam. This polyurethane foam offers the highest thermal insulation value and the most energy efficiency per cubic inch in comparison to similar foams. It has a zero Ozone Depletion Potential (ODP) and a low Global Warming Potential (GWP). It is not considered a Volatile Organic Compound (VOC) in the US. Standard 4" Bally panels meet the 2009 Federal Energy Standards.

Refrigerants: Unless otherwise specified, refrigeration systems are quoted with environmentally friendly HFC R404A refrigerant. It has a zero Ozone Depletion Potential (ODP). The EPA lists it as an acceptable substitute for ozone-depleting substances.

Automatic Door Closers: Bally includes automatic door closers and spring loaded hinges on all doors 42" wide and smaller as a standard feature with no additional charge that meet the 2009 Federal Energy Standards.

Motors: Bally units are quoted with EC and PSC motors in compliance with federal energy standards, for increased energy savings.

Lighting: Bally units are quoted with lighting in compliance with federal Energy Standards for increased energy savings.

Optional Features: Bally offers additional optional energy-saving features such as Walk-In Alarm & Light Management systems that comply or surpass the 2009 Federal energy regulations

Bally Refrigeration Warranty Coverage Includes the following: 10 year Panel Warranty, 1 year Parts Warranty, 5 Year Compressor Warranty, 5 Year Refrigeration System Warranty, 1 Year Labor Warranty on 3 HP units or lower

Item 1.002 - EVAPORATOR COIL COOLER (+35) (1 REQ'D)

Bally Refrigerated Boxes Model CUSTOM

See item #1.001 for full specifications.

Item 1.003 - REMOTE CONDENSER UNIT (1 REQ'D)

Bally Refrigerated Boxes Model CUSTOM

See item 1.001 for full specifications. See AFS Standard Details 7.06, 7.06.1, 7.06.2, 7.06.3, 7.06.4. Wall Mounted Unit. FSEC to mount condenser on existing platform 6" off wall and equal distances from either side. FSEC to provide mounting hardware and metallic anchors.

See SKFS-2, added to Dwg. FS-1.5

Item 1.004 - WALK-IN-FREEZER (-10) (1 REQ'D)

Bally Refrigerated Boxes Model CUSTOM

Item 1.005 - EVAPORATOR COIL FREEZER -10) (1 REQ'D)

Bally Refrigerated Boxes Model CUSTOM

See item #1.001 for full specifications

Item 1.006 - REMOTE CONDENSER UNIT (1 REQ'D)

Bally Refrigerated Boxes Model CUSTOM

See item 1.001 for full specifications. See AFS Standard Detail 7.06, 7.06.1, 7.06.2, 7.06.3, 7.06.4.

Floor Mounted Unit. FSEC to provide mounting hardware and metallic anchors.

See SKFS-2, added to Dwg. FS-1.5

Item 1.007 - OPEN NUMBER

Item 1.008 - OPEN NUMBER

Item 1.009 - OPEN NUMBER

Item 1.010 - STORAGE SHELVING UNITS

Bally Refrigerated Boxes Model CUSTOM

Cantilevered shelving by Bally-Per Shop Drawing Plan

Item 1.011 - STORAGE SHELVING UNITS

Bally Refrigerated Boxes Model CUSTOM

Cantilevered shelving by Bally-Per Shop Drawing Plan

PART-3 EXECUTION

3.01 Fabrication:

- A Field joints, where required, shall be steel reinforced and gasketed so that tops can be tightly jointed to a hair-line connection.
- B. Welds shall be of full penetration and the entire length of the joint, without imperfections, burns, or buckles. Welds shall be ground and polished to match color and finish of adjacent metal. Welding shall be by electric fusion metal-arc method using rods of same composition and material as parts welded.
- C. All exposed surfaces, and other surfaces where possible, shall be free of bolt, screw, or rivet heads. Wherever bolts are used, they shall be of concealed type, and wherever they occur on the inside of the fixtures and are visible or subject to contact by hands or wiping cloths, they shall have suitable lock washers and chrome-plated brass or bronze acorn nuts.

D. All soldering for water lines shall be done with lead-free solder.

3.02 Materials:

- A. Unless otherwise indicated, fabricated items shall be constructed of the following materials:
1. Stainless steel shall be Type 302, 18-8 composition of U.S. Standard gauge specified.
 2. Exposed faces shall have #4 mill finish; concealed faces shall have minimum 100 grit finish.
 3. Hardware shall be heavy-duty chromed white metal or stainless steel.

3.03 Installation:

- A. Equipment shall be installed level and square in its final position as shown on drawings. Trim and traps shall be installed ready for final connections by Plumbing Contractor. All controls, control wiring, and terminal blocks shall be in place and prepared for power connection by the Electrical Contractor.

3.04 Testing and Cleaning:

- A. After all equipment is finally installed and connected, the Contractor shall test all lines and services, and shall determine that all such services are satisfactory and operational. All items of equipment shall then be put into operation and adjusted to the satisfaction of the Owner and Architect. All equipment shall finally be thoroughly cleaned and otherwise be prepared for use by the Owner.

3.05 Instructions:

- A. The Contractor shall provide selected members of the Owner's dietary and educational staff with a period of instruction wherein the proper and safe use and operation of the complete food service system is demonstrated and explained. The instruction period shall be of such duration that those personnel in attendance will be reasonably well trained in the operation of all equipment. The instruction may be by, or instructor may be, a factory representative or a member of the Contractor's staff; however, he shall, to the satisfaction of the Owner and the Architect, be knowledgeable and proficient in the operation of the equipment demonstrated.
- B. The Contractor shall provide the Owner with manufacturers' instruction and maintenance manuals for all items with moving parts or items for which replacement or repair parts can be anticipated.

3.06 Sanitary Sealing:

- A. All joints between equipment items abutting or adjoining item to item; all joints between walls and equipment items abutting thereto; and, all other wall, ceiling, and floor joints between dissimilar materials or other such joints otherwise open to entry of spillage, soil, or bacterial shall be caulked tight, full, and continuously with General Electric Company's silicone clear sealant, in conformance with the regulations set forth by the State Departments of Health and Environmental Resources.

END OF SECTION



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BQHA010E6-HT3A

**QUIET LINE - HERMETIC
CONDENSING UNIT**

PURCHASER :

SUBMITTED BY : **Joan M. Hoch**

PROJECT : **Bancroft Elem -**

DATE : **06 Feb 2013**

ORDER # : **02860.36180.00136P-A00**

ITEM # : **1**

QUOTE # : **Q31JKJMA-A**

ID # :

PURCHASER'S PO # :

TAGGING : **Cooler**

MODEL FEATURES

- Copper tubing secured with cushion clamps
- Fan motors are inherently protected with internal overloads
- Pre-formed piping
- Receiver with fusible plug and liquid shut off valve
- Suction and discharge service valves
- Weatherproof electrical control box with compressor contactor and fused control circuit
- THERMOSPAN coil design feature eliminates tube failure on tube sheets
- Ultra efficient Electronically Commutated Motor (ECM)
- Fixed high and low pressure control
- Unit shipped with Nitrogen Holding Charge
- Powder Coat Painted Cabinet
- Gold Coat Fins
- High efficiency enhanced copper tube and aluminium fin coil design
- EC Motor Speed Controller

MODEL OPTIONS (* = Shipped Loose)

PRE-ENGINEERED OPTION PACKAGE

- A - STD
- B
- C
- 1** D
- E
- F
- G
- H
- J
- K
- 115V Control Circuit**
- 1** **Compressor Sound Insulation**

- Discharge Line Check Valve DISCONNECT SWITCH**
- Non-Fused
- Extended 4-Year Compressor Warranty**
- FIN AND COIL MATERIAL**
- Electro Fin Coating
- Copper Fins
- Heresite Coating
- 1** **Heated and Insulated Receiver**
- LIQUID LINE FILTER + SIGHT GLASS**
- 1** Sealed
- Pump Down Toggle Switch**

SUCTION ACCUMULATOR

- Without Heat Exchanger

SUCTION FILTER

- Sealed Type

TIME CLOCK

- Paragon 8145 Style
- *230V Paragon 8145 Style
- *115V Paragon 8145 Style

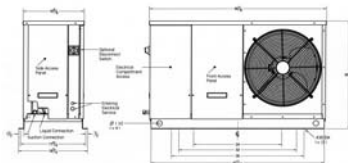
Wall Mount Kit

- Wind Guard**

VOLTAGE	SYSTEM REFRIGERANT	RATING	SUCTION TEMP	AMBIENT TEMP	CAPACITY
208-230/3/60	R404A	1Hp	25.4 °F	95.0 °F	10,650 BTUH

FANS			COMPRESSOR				CIRCUIT TOTAL			
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡
1	165W	1.7	RST70C1ETFC		4.2	31	5.9		7	15

Dim A	
Dim B	
Dim C	
Dim D	
LIQUID	3/8 in
SUCTION	5/8 in
SOUND	-
WEIGHT	315 lb
CAPACITY	11 lb



Dimensions shown are for standard unit less options. See certified drawing for more details.

* Indicates Option Is Shipped Loose
 † MCA.. Minimum Circuit Ampacity
 ‡ MOP.. Maximum Overcurrent Protection
 MCA & MOP Shown Here are reflective of the condensing unit ONLY. Single point connections WILL show different on dataplate.

APPROVALS

APPROVED BY :

DATE :

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 1
BQHA010E6-HT3A
QUIET LINE - HERMETIC
CONDENSING UNIT

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

DATE : **06 Feb 2013**
PURCHASER :
PROJECT : **Bancroft Elem -**
SUBMITTED BY : **Joan M. Hoch**

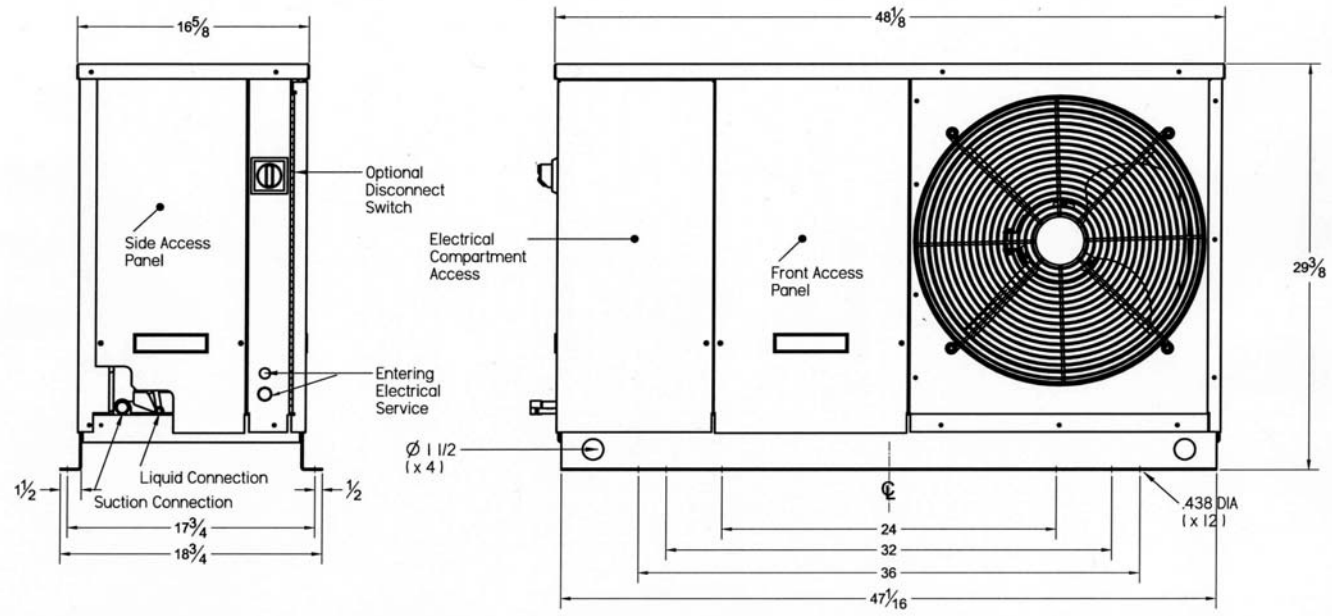
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	
DIMENSION B	
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	
DIMENSION H	

CONNECTIONS	
LIQUID	3/8 in
SUCTION	5/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	

OTHER	
SHIPPING WEIGHT	315 lb
CAPACITY	11 lb

APPROVALS			



NOTES:



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP211MA-S1B_ECM

**LOW PROFILE
EVAPORATOR**

PURCHASER :

SUBMITTED BY : **Joan M. Hoch**

PROJECT : **Bancroft Elem -**

DATE : **06 Feb 2013**

ORDER # : **02860.36180.00136P-A00**

ITEM # : **2**

QUOTE # : **Q31JKJMA-A**

ID # :

PURCHASER'S PO # :

TAGGING : **Cooler**

MODEL FEATURES

- 3/8" Tubing coil construction (reduces refrigerant operating charge)
- Factory installed solenoid valve wire harness
- Heavy gauge textured aluminum cabinet construction resists scratches/corrosion
- Spacious piping end compartment allows for easy assembly
- Hinged drain pan with central universal drain connection (3/4" drain)
- Front access to spacious electrical and header compartments
- Schrader connection on suction header
- Attractive and durable high density polyethylene fan guards
- Ultra efficient Electronically Commutated Motor (ECM)
- ECM with SmartSpeed Technology
- High efficiency enhanced copper tube and aluminium fin coil design

MODEL OPTIONS (* = Shipped Loose)

PRE-ASSEMBLED EVAP

- Sporlan TXV, LLSV, T-stat
- SmartVapII with Sporlan TXV & Solvlv
- KE2 Demand Defrost w/Sporlan TXV
- KE2 Demand Defrost w/Sporlan EEV
- *KE2 Demand Defrost w/Sporlan TXV
- *KE2 Demand Defrost w/Sporlan EEV
- 1 Danfoss TXV, LLSV, T-stat
- SmartVapII with Danfoss TXV & Solvlv
- Alco TXV, LLSV, T-stat
- KE2 Demand Defrost w/KE2 EEV
- *KE2 Demand Defrost w/KE2 EEV

ADJUSTABLE T-STATS

- *Johnson A19ABC-24
- *Johnson A419ABC-1
- *Saginomiya
- *Danfoss

Aux Sideport Connector

CABINET FINISH

- Painted White
- Painted Black
- Stainless Steel

CPC SENSORS

- Coil Temp Sensor
- Return Air Temp Sensor
- Suction Pressure Transducer

DEMAND DEFROST ELECTRONIC CONTROLLER

- KE2 Therm - Demand Defrost
- *KE2 Therm - Demand Defrost

Dual Circuit

- EEV SENSOR/TRANSDUCER BRAND
- CPC/Emerson
- Other - Specify in Notes

ELECTRONIC CONTROLLER

- SmartVapII
- *Other EEV Controller- Specify MFR Model in Notes

**Evaporator Disconnect Switch
EVAPORATOR PRISON PACKAGE**

- Tamper Proof Screws

EXPANSION VALVE

- Sporlan TXV
- 1 Danfoss TXV
- Sporlan EEV (less sens+trans)
- Alco TXV

FIN AND COIL MATERIAL

- Electro Fin Coating
- Copper Fins
- Heresite Coating

Insulated Drain Pan

KE2 THERM

- *KE2 Router #20184
- *KE2 8 Port Switch #20166
- *CAT5e Shielded Cable - 50ft w/connectors
- *Contactor Kit - 50A #20217

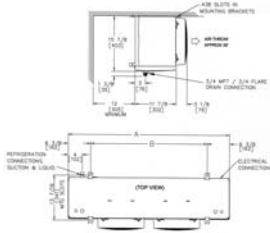
***Liquid / Suction Heat Exchanger**

LIQUID LINE SOLENOID VALVE

- 1 Danfoss
- Sporlan
- Alco
- 1 Room Thermostat
- *Room Thermostat
- Wire Fan Guards

VOLTAGE		SYSTEM REFRIGERANT		AIR FLOW		EVAP. TEMP		BOX TEMP		CAPACITY	
115/1/60		R404A		1910 CFM		25.4 °F		35.0 °F		10,576 BTUH	
FANS			HEATERS			CIRCUIT TOTAL					
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡		
2	0.05HP	1				2	120	2.3	15		
						2	120	2.3	15		

Dim A	46 1/4 in
Dim B	33 1/4 in
Dim C	
Dim D	
DISTRIBUTOR	1/2 in
SUCTION	7/8 in
SOUND	-
WEIGHT	74 lb
CHARGE	2 lb



Dimensions shown are for standard unit less options. See certified drawing for more details.

* Indicates Option Is Shipped Loose
† MCA.. Minimum Circuit Ampacity
‡ MOP.. Maximum Overcurrent Protection

APPROVALS	

APPROVED BY :

DATE :

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 2
BLP211MA-S1B_ECM
**LOW PROFILE
EVAPORATOR**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

DATE : **06 Feb 2013**
PURCHASER :
PROJECT : **Bancroft Elem -**
SUBMITTED BY : **Joan M. Hoch**

Dimensions shown are for standard unit less options.

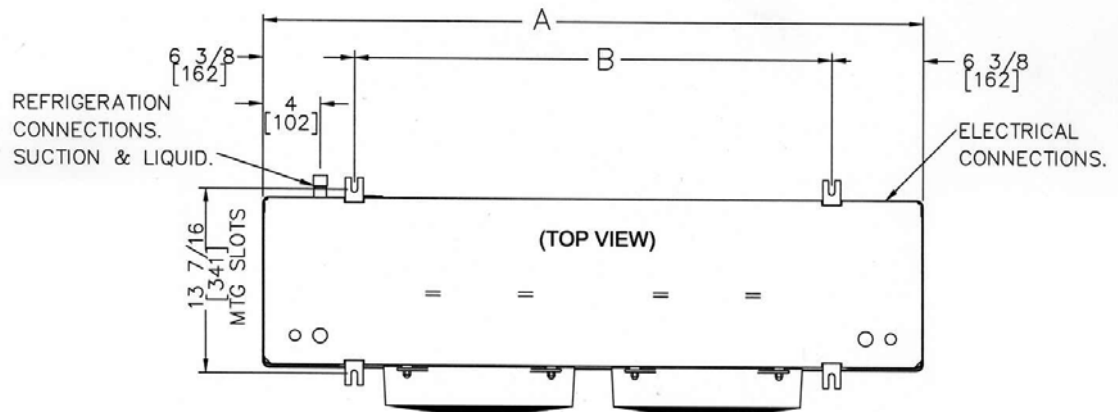
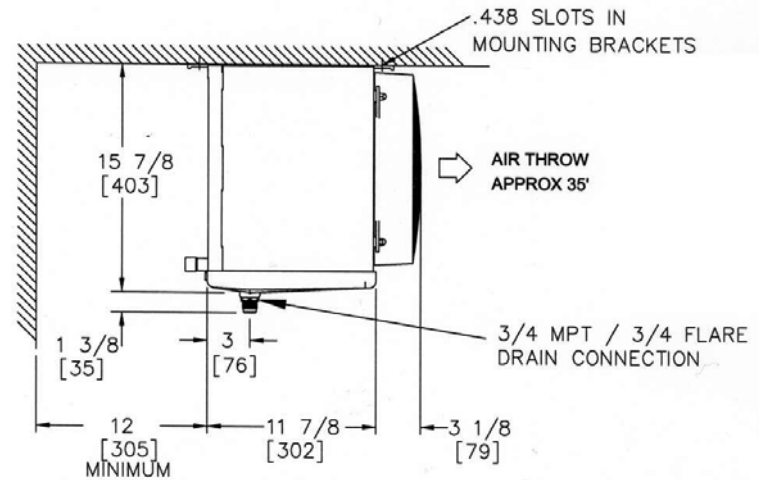
DIMENSIONS	
DIMENSION A	46 1/4 in
DIMENSION B	33 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
DISTRIBUTOR	1/2 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	

OTHER	
SHIPPING WEIGHT	74 lb
CHARGE	2 lb

APPROVALS			

NOTES:





**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BQZA035L6-HT3A

**QUIET LINE - SCROLL
CONDENSING UNIT**

PURCHASER :

SUBMITTED BY : **Joan M. Hoch**

PROJECT : **Bancroft Elem -**

DATE : **06 Feb 2013**

ORDER # : **02860.36180.00136P-A00**

ITEM # : **3**

QUOTE # : **Q31JKJMA-A**

ID # :

PURCHASER'S PO # :

TAGGING : **FREEZER**

MODEL FEATURES

- Copper tubing secured with cushion clamps
- Discharge line thermostat
- Pre-formed piping
- Receiver with fusible plug and liquid shut off valve
- Space saving, compact design
- Sturdy electrical control box with compressor contactor and fused control circuit

- Suction and discharge service valves
- Weatherproof electrical control box with compressor contactor and fused control circuit
- Welded hermetic Scroll compressor
- Heavy guage galvanized steel cabinet construction

- Ultra efficient Electronically Commutated Motor (ECM)
- Unit shipped with Nitrogen Holding Charge
- Powder Coat Painted Cabinet
- Gold Coat Fins
- Liquid injection (low temp models)
- High efficiency enhanced copper tube and aluminium fin coil design
- EC Motor Speed Controller

MODEL OPTIONS (* = Shipped Loose)

PRE-ENGINEERED OPTION PACKAGE

- A - STD
- B
- C
- D
- E
- F
- 1** G
- H
- J
- K
- 115V Control Circuit**
- 1** Compressor Sound Insulation

DISCONNECT SWITCH

- Discharge Line Check Valve
- Non-Fused
- Extended 4-Year Compressor Warranty**

FIN AND COIL MATERIAL

- Electro Fin Coating
- Copper Fins
- Heresite Coating

LIQUID LINE FILTER + SIGHT GLASS

- 1** Sealed
- Pump Down Toggle Switch

SUCTION ACCUMULATOR

- Without Heat Exchanger

SUCTION FILTER

- Sealed Type

TIME CLOCK

- 1** Paragon 8145 Style
- *230V Paragon 8145 Style
- *115V Paragon 8145 Style

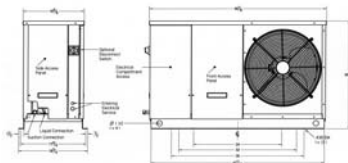
Wall Mount Kit

- Wind Guard

VOLTAGE	SYSTEM REFRIGERANT	RATING	SUCTION TEMP	AMBIENT TEMP	CAPACITY
208-230/3/60	R404A	3.5Hp	-19.4 °F	95.0 °F	12,994 BTUH

FANS			COMPRESSOR				CIRCUIT TOTAL			
QTY	POWER	FLA/FAN	TYPE	QTY	RLA	LRA	AMPS	WATTS	MCA†	MOP‡
1	165W	1.7	VSA9514ZXT		12.1	88	13.8		16.8	25

Dim A	
Dim B	
Dim C	
Dim D	
LIQUID	1/2 in
SUCTION	7/8 in
SOUND	58dBA
WEIGHT	325 lb
CAPACITY	20 lb



Dimensions shown are for standard unit less options. See certified drawing for more details.
* Indicates Option Is Shipped Loose
† MCA.. Minimum Circuit Ampacity
‡ MOP.. Maximum Overcurrent Protection
MCA & MOP Shown Here are reflective of the condensing unit ONLY. Single point connections WILL show different on dataplate.

APPROVALS	

APPROVED BY :

DATE :

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 3
BQZA035L6-HT3A

**QUIET LINE - SCROLL
CONDENSING UNIT**

DATE : **06 Feb 2013**

PURCHASER :

PROJECT : **Bancroft Elem -**

SUBMITTED BY : **Joan M. Hoch**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

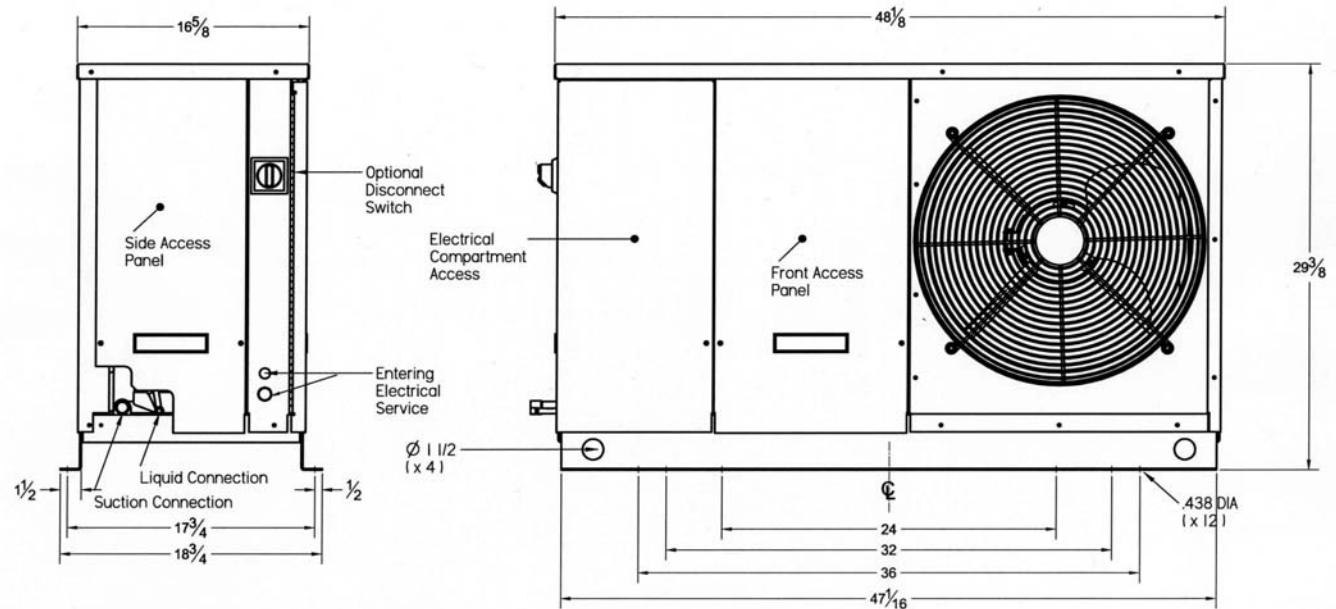
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	
DIMENSION B	
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	
DIMENSION H	

CONNECTIONS	
LIQUID	1/2 in
SUCTION	7/8 in
DRAIN	
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	

OTHER	
SHIPPING WEIGHT	325 lb
CAPACITY	20 lb

APPROVALS			



NOTES:



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**
159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

BLP314LE-S2B_ECM

**LOW PROFILE
EVAPORATOR**

PURCHASER :

SUBMITTED BY : **Joan M. Hoch**

PROJECT : **Bancroft Elem -**

DATE : **06 Feb 2013**

ORDER # : **02860.36180.00136P-A00**

ITEM # : **4**

QUOTE # : **Q31JKJMA-A**

ID # :

PURCHASER'S PO # :

TAGGING : **Freezer**

MODEL FEATURES

- 3/8" Tubing coil construction (reduces refrigerant operating charge)
- Factory installed solenoid valve wire harness
- Heavy gauge textured aluminum cabinet construction resists scratches/corrosion
- Spacious piping end compartment allows for easy assembly
- Hinged drain pan with central universal drain connection (3/4" drain)
- Front access to spacious electrical and header compartments
- Schrader connection on suction header
- Attractive and durable high density polyethylene fan guards
- Ultra efficient Electronically Commutated Motor (ECM)
- ECM with SmartSpeed Technology
- High efficiency enhanced copper tube and aluminium fin coil design

MODEL OPTIONS (* = Shipped Loose)

PRE-ASSEMBLED EVAP

- Sporlan TXV, LLSV, T-stat
- SmartVapII with Sporlan TXV & Solvlv
- KE2 Demand Defrost w/Sporlan TXV
- KE2 Demand Defrost w/Sporlan EEV
- *KE2 Demand Defrost w/Sporlan TXV
- *KE2 Demand Defrost w/Sporlan EEV
- 1 Danfoss TXV, LLSV, T-stat
- SmartVapII with Danfoss TXV & Solvlv
- Alco TXV, LLSV, T-stat
- KE2 Demand Defrost w/KE2 EEV
- *KE2 Demand Defrost w/KE2 EEV

ADJUSTABLE T-STATS

- *Johnson A19ABC-24
- *Johnson A419ABC-1
- *Saginomiya
- *Danfoss
- Ranco F25 - Adjustable DT, Fixed FD

Aux Sideport Connector

CABINET FINISH

- Painted White
- Painted Black
- Stainless Steel

CPC SENSORS

- Coil Temp Sensor
- Return Air Temp Sensor
- Suction Pressure Transducer

DEMAND DEFROST ELECTRONIC CONTROLLER

- KE2 Therm - Demand Defrost
- *KE2 Therm - Demand Defrost

Dual Circuit

EEV SENSOR/TRANSDUCER BRAND

- CPC/Emerson
- Other - Specify in Notes

ELECTRONIC CONTROLLER

- LINC
- SmartVapII
- *Other EEV Controller- Specify MFR Model in Notes

EVAPORATOR PRISON PACKAGE

- Tamper Proof Screws

EXPANSION VALVE

- Sporlan TXV
- 1 Danfoss TXV
- Sporlan EEV (less sens+trans)
- Alco TXV

FIN AND COIL MATERIAL

- Electro Fin Coating
- Copper Fins
- Heresite Coating

Insulated Drain Pan

KE2 THERM

- *KE2 Router #20184
- *KE2 8 Port Switch #20166
- *CAT5e Shielded Cable - 50ft w/connectors
- *Contactor Kit - 50A #20217

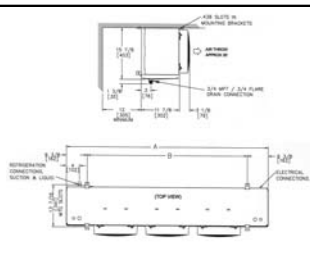
***Liquid / Suction Heat Exchanger**

LIQUID LINE SOLENOID VALVE

- 1 Danfoss
- Sporlan
- Alco
- 1 Room Thermostat
- *Room Thermostat
- Wire Fan Guards

VOLTAGE	SYSTEM REFRIGERANT	AIR FLOW	EVAP. TEMP	BOX TEMP	CAPACITY				
208-230/1/60	R404A	2860 CFM	-19.4 °F	-10.0 °F	13,166 BTUH				
FANS		HEATERS			CIRCUIT TOTAL				
QTY	POWER	FLA/FAN	TYPE	QTY	AMPS	AMPS	WATTS	MCA†	MOP‡
3	0.07HP	0.6				1.8	180	2	15
			DEFROST HTRS		11.9		2730	14.8	15

Dim A	62 1/4 in
Dim B	49 1/4 in
Dim C	
Dim D	
DISTRIBUTOR	1/2 in
SUCTION	7/8 in
SOUND	-
WEIGHT	109 lb
CHARGE	3 lb



Dimensions shown are for standard unit less options. See certified drawing for more details.

* Indicates Option Is Shipped Loose
† MCA.. Minimum Circuit Ampacity
‡ MOP.. Maximum Overcurrent Protection

APPROVALS	
<input type="checkbox"/>	CE
<input checked="" type="checkbox"/>	UL US
<input type="checkbox"/>	NSF

APPROVED BY :

DATE :

Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.



**NATIONAL REFRIGERATION AND
AIR CONDITIONING CANADA CORP.**

159 ROY BLVD, PO BOX 2020
BRANTFORD, ON
CANADA N3T 5Y6

Order Item No: 4
BLP314LE-S2B_ECM
**LOW PROFILE
EVAPORATOR**

NATIONAL REFRIGERATION will furnish equipment in accordance with this drawing and specifications, and subject to its published warranty. Approval of this drawing signifies that the equipment is acceptable under the provision of the job specifications. Any change made hereon by any person whomsoever subject to acceptance by NATIONAL REFRIGERATION at its home office.

DATE : **06 Feb 2013**
PURCHASER :
PROJECT : **Bancroft Elem -**
SUBMITTED BY : **Joan M. Hoch**

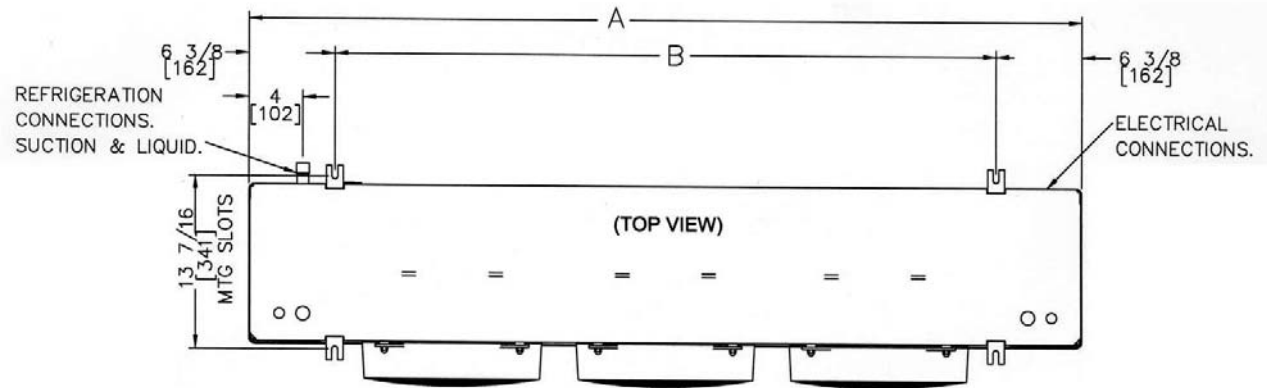
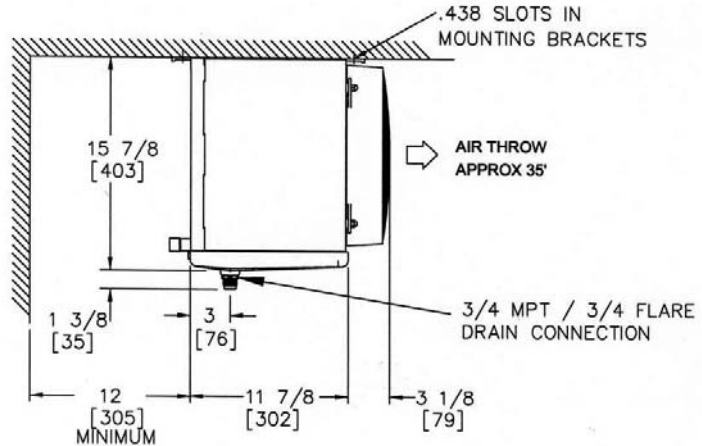
Dimensions shown are for standard unit less options.

DIMENSIONS	
DIMENSION A	62 1/4 in
DIMENSION B	49 1/4 in
DIMENSION C	
DIMENSION D	
DIMENSION E	
DIMENSION F	
DIMENSION G	0 in
DIMENSION H	

CONNECTIONS	
DISTRIBUTOR	1/2 in
SUCTION	7/8 in
DRAIN	3/4 in
WATER	
DISCHARGE	
PAN LOOP	
HOT GAS SIDE PORT	
HOT GAS INLET	
HOT GAS OUTLET	

OTHER	
SHIPPING WEIGHT	109 lb
CHARGE	3 lb

APPROVALS			



NOTES:

UTILITY SCHEDULE			ELECTRICAL						
ITEM NO.	QTY.	DESCRIPTION	ELECTRICAL REMARKS / MECHANICAL REMARKS	CONNECTION SR DR EC SW	VOLT/PHASE	AFF	AMPS	KW	HP
1.001	1	WALK-IN COOLER(+35F)	LIGHTS-DOOR HEATER	EC	120/1	106'	15.0		
1.002	1	EVAPORATOR COIL COOLER(+35F)		EC	120/1	100'	2.3		
1.003	1	REMOTE REFRIG. COMPRESSOR/ CONDENSER(+35F)		EC	208-230/3	12"	5.9		
1.004	1	WALK-IN FREEZER(-10F)	LIGHTS-DOOR HEATER	EC	120/1	106'	15.0		
1.005	1	EVAPORATOR COIL FREEZER(-10F)		(L1)-EC (L2)-EC	208-230/1 208-230/1	100'	1.8 11.9		
1.006	1	REMOTE REFRIG. COMPRESSOR/ CONDENSER(-10F)		EC	208-230/3	12"	13.8		
1.007		OPEN NUMBER							
1.008		OPEN NUMBER							
1.009		OPEN NUMBER							
1.010	10	STORAGE SHELVING UNIT(S)							
1.011	4	STORAGE SHELVING UNIT(S)							

REF. DWG. FS-1.7

TITLE: FOODSERVICE EQUIPMENT UTILITY SCHEDULE

PROJECT: BANCROFT ELEMENTARY SCHOOL
 700 N. LOMBARD STREET WILMINGTON, DE 19801
 CHRISTINA SCHOOL DISTRICT

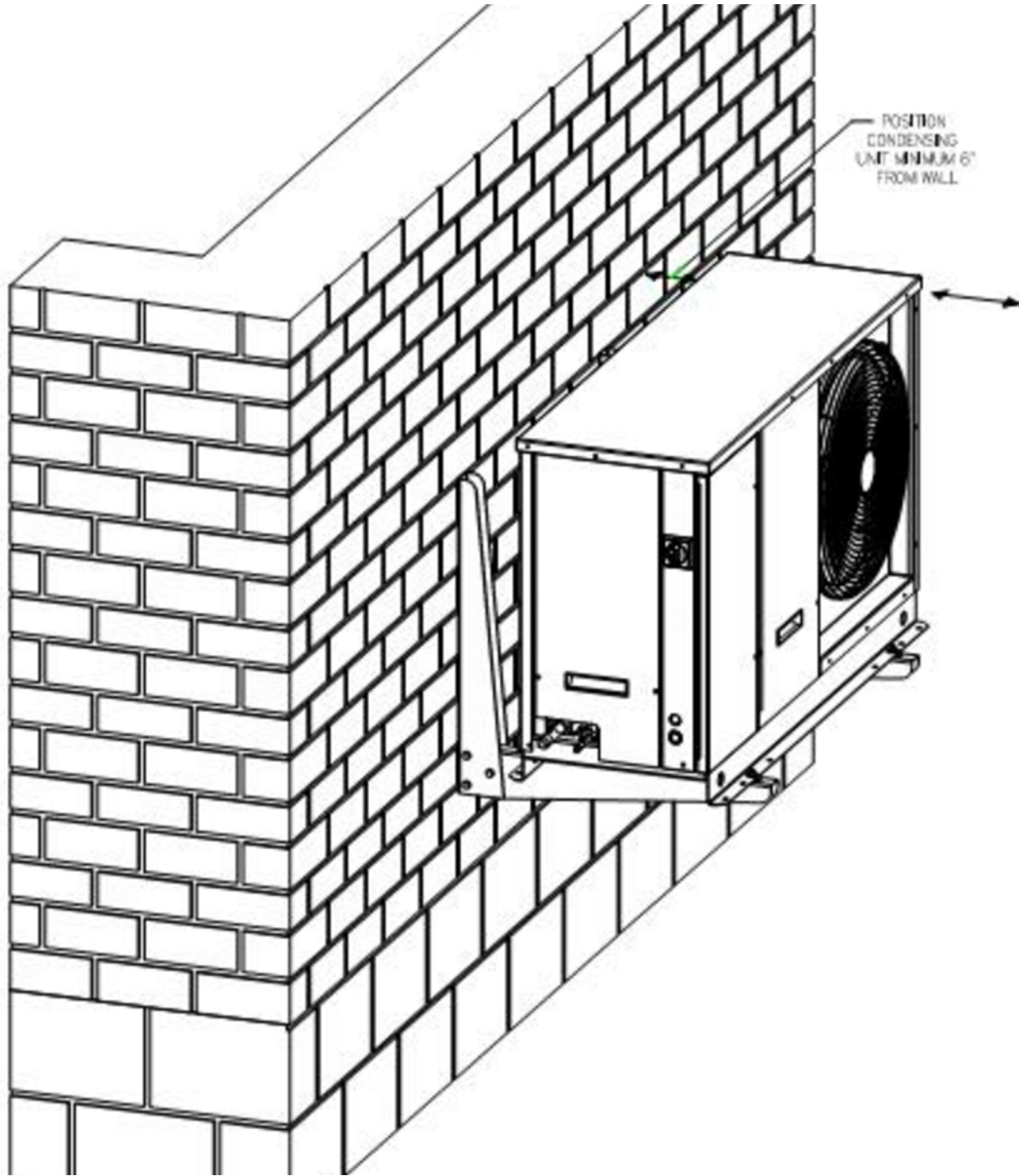
EI ASSOCIATES

ISSUE DATE
02.20.2013

EIA PROJECT NO.
PP7279

PDE PROJECT NO.

EIA DRAWING NO.
SKFS-1



REF. DWG. FS-1.5

TITLE: MOUNTING DTL. WALL MOUNT CONDENSER

PROJECT: BANCROFT ELEMENTARY SCHOOL
 700 N. LOMBARD STREET WILMINGTON, DE 19801
 CHRISTINA SCHOOL DISTRICT

ISSUE DATE
 02.20.2013

EIA PROJECT NO.
 PP7279

PDE PROJECT NO.

EIA DRAWING NO.

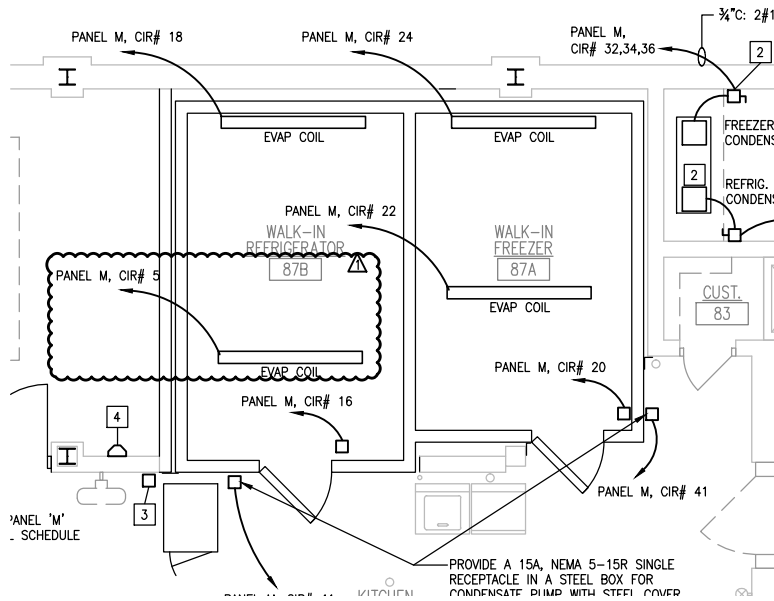
SKFS-2

EI EI ASSOCIATES

PANEL NO. <u> </u> M <u> </u>		TYPE <u>208/120V-3φ-4W</u>	
AREA <u> </u> KITCHEN <u> </u>		MAIN LUGS <u> </u> 225A <u> </u>	
DESCRIPTION	BRKR SIZE	CIR NO	DESCRIPTION
		1	
REFRIGERATOR EVAP. COIL	15A	3	
		5	
		7	
		9	
		11	
		13	
		15	20A REFRIG. POWER AND LIGHTS
		17	20A REFRIG. EVAP COIL
		19	20A FREEZER POWER AND LIGHTS
		21	15A FREEZER EVAP COIL
		23	15A FREEZER EVAP COIL
		25	
		27	15A REFRIG. CONDENSER
		29	
		31	
		33	25A FREEZER CONDENSER
		35	
		37	
		39	
CONDENSATE PUMPS	15A	41	

PENN PANEL WITH SIEMENS CIRCUIT BREAKERS

EXISTING POWER PANEL



REF. DWG. E1

TITLE: PARTIAL FIRST FLOOR PLAN

PROJECT: BANCROFT ELEMENTARY SCHOOL
700 N. LOMBARD STREET WILMINGTON, DE 19801
CHRISTINA SCHOOL DISTRICT

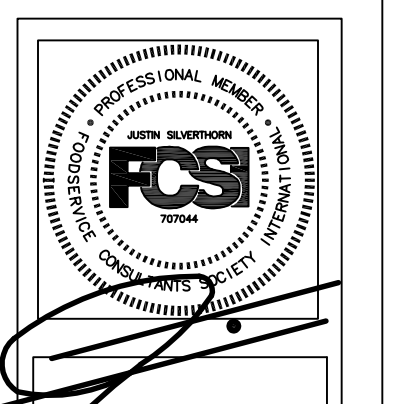
ISSUE DATE
02/22/2013

EIA PROJECT NO.
PP7279

PDE PROJECT NO.

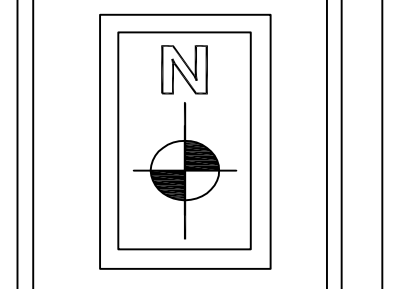
EIA DRAWING NO.
ESK-1





FOODSERVICE BUSINESS & DESIGN
424 HILLSIDE DRIVE
MOUNTVILLE, PA.
17554 U.S.A.
717-522-1102

Project Executive
Justin Jensen Silverman
Drawn/CAD By
RMS/JJS
Date Drawn
Scale
AS NOTED



Project Number
12-0173

SPECIFICATIONS
19'-3" X 15'-5" X 7'-10" W/ 6" PANELS & 4" PARTITION

INSTALLATION
- INDOOR
- LOADING HEIGHT - AT LEAST 24" OF OPEN SPACE MUST BE MAINTAINED BETWEEN TOP OF PRODUCT AND CEILING PANELS

INSULATION
- FOAMED IN-PLACE POURED URETHANE

EXTERIOR FINISH
- EMBOSSED STAINLESS STEEL AS SHOWN
- EMBOSSED GALVALUME REMAINDER

INTERIOR FINISH
- SMOOTH STAINLESS STEEL

FLOOR FINISH
- (INTERIOR) GALVANIZED STEEL (EPOXY OVERLAY B.O.)
- (EXTERIOR) EMBOSSED GALVALUME

DOORS/ACCESSORIES
- (1) 36" X 78" LEFT SWING 6" HINGED WALK-IN DOOR
Door Options:
(1) Super Doors: 3rd Hinge & 36" High Dia. Tread In & Out
(1) Heated Threshold With Depression Stepplate
(1) Less Thermometer
(1) 14" x 24" Obs. Window (Heated) W/Ext. Cross-Over Cord
(1) Fourth Hinge
(1) Foot Treadle
(1) Kason L.E.D. Light
(1) Pressure Relief Port

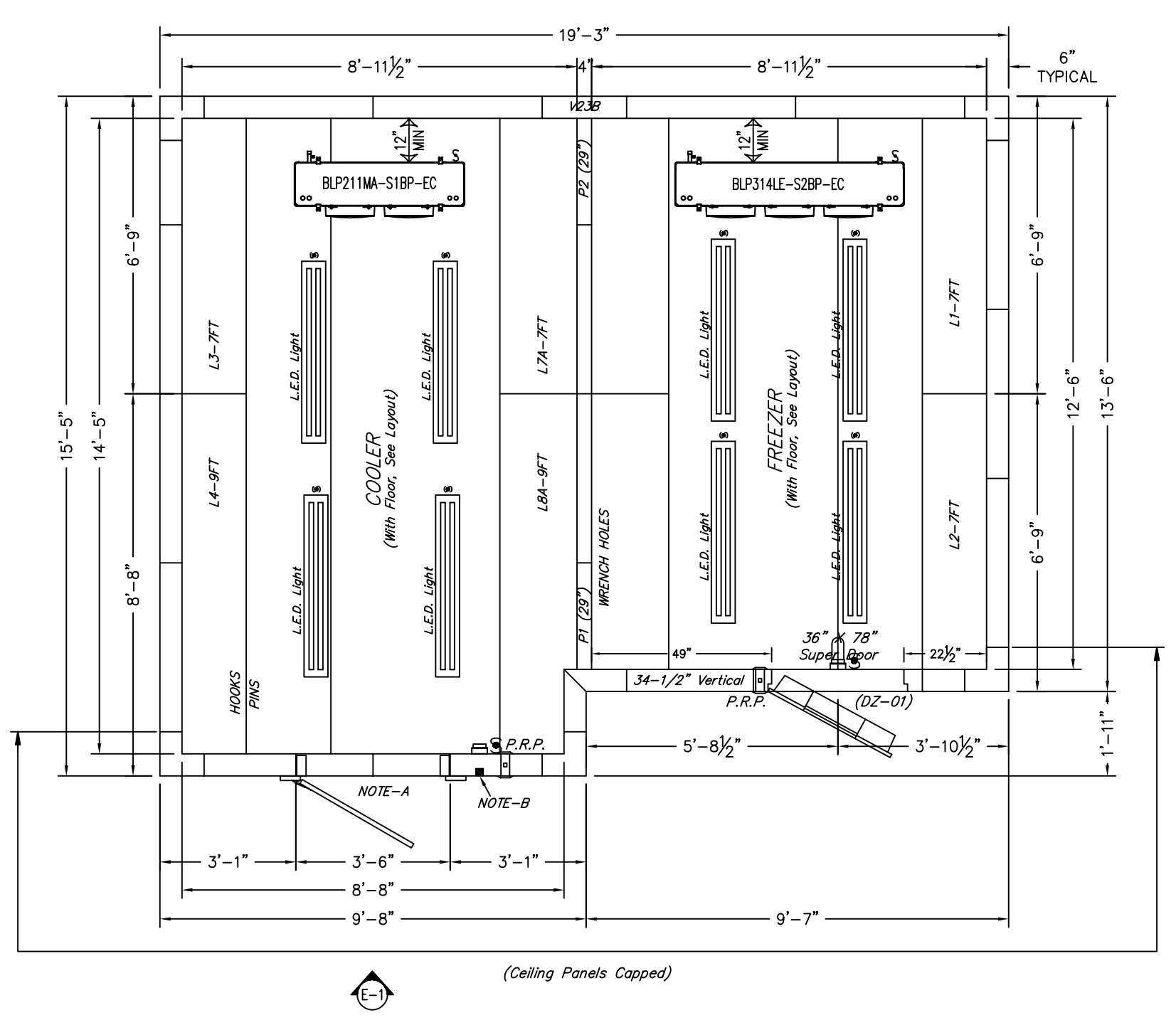
REFRIGERATION - BY BALLY
(1) Super Doors: 3rd Hinge & 36" High Dia. Tread In & Out
(1) Heated Threshold With Depression Stepplate
(1) Less Thermometer
(1) 14" x 24" Obs. Window (Heated) W/Ext. Cross-Over Cord
(1) Fourth Hinge
(1) Foot Treadle
(1) Kason L.E.D. Light
(1) Pressure Relief Port

QTY	W/P	REF	TYPE	MODEL NUMBER	POWER SUPPLY	COMPRESSOR	FAN W/TS	TOTAL W/TS	DISPLACEMENT	HP	FLA	TRK	W/TS	W/TS	W/TS	W/TS
1	1.0	1.0	PROH	4000T002-HE40	208-230/1/60	1/4 1/2	1	1.2	1.2	2.0	15	1	1.2	2.0	15	1
1	1.0	1.0	PROH	4000T002-HE40	208-230/1/60	1/4 1/2	1	1.2	1.2	2.0	15	1	1.2	2.0	15	1
1	1.0	1.0	PROH	4000T002-HE40	208-230/1/60	1/4 1/2	1	1.2	1.2	2.0	15	1	1.2	2.0	15	1
1	1.0	1.0	PROH	4000T002-HE40	208-230/1/60	1/4 1/2	1	1.2	1.2	2.0	15	1	1.2	2.0	15	1

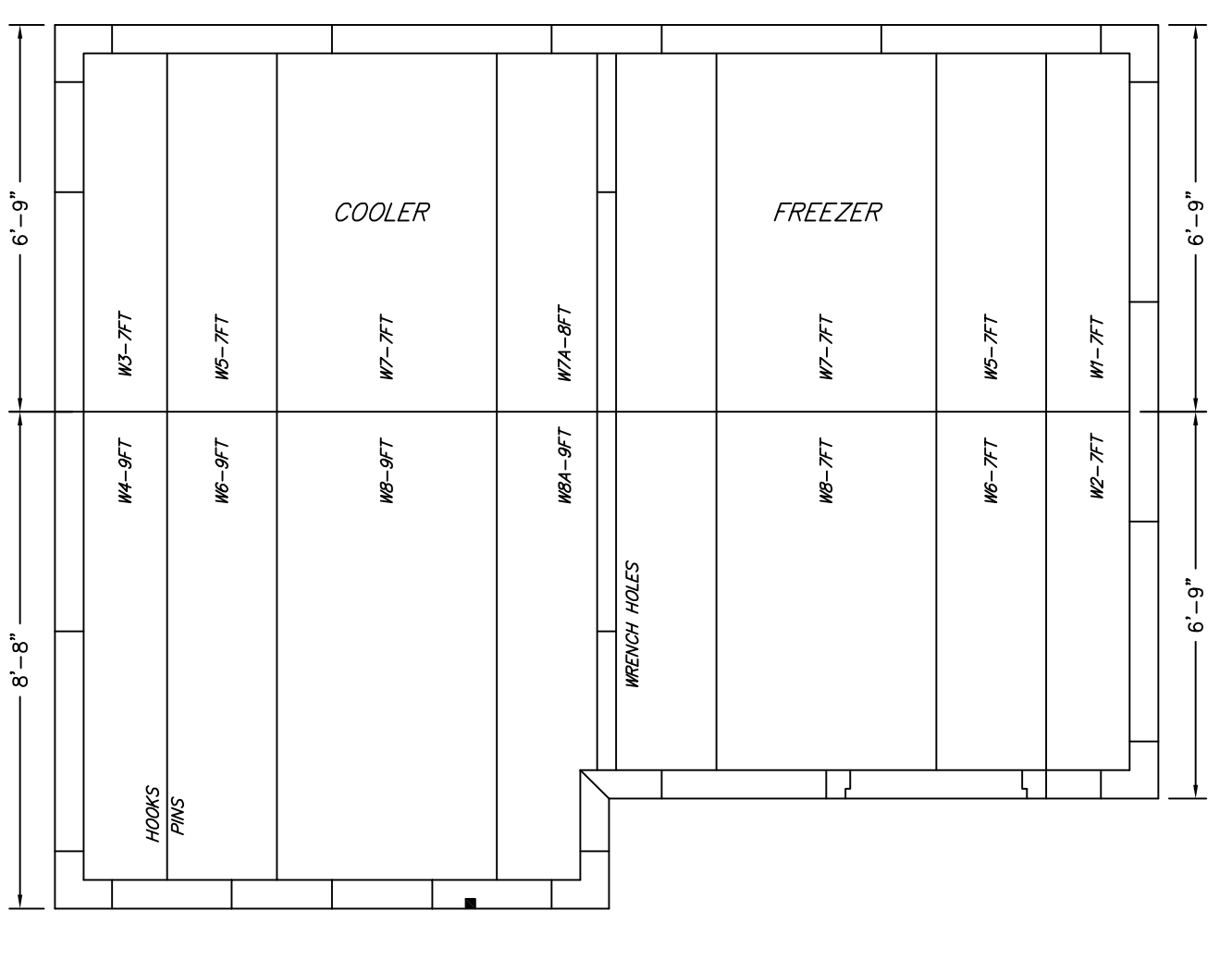
- (2) Heated & Insulated Receivers
- (2) Sound Insulated Compressor

GENERAL NOTES

- NOTE-A: BALLY TO FURNISH (1) WOOD FRAMED OPENING (C-CAPPED): 3'-5" WIDE X 82" HIGH. OPENING STARTS AT BOTTOM OF VERTICAL PANELS.
- NOTE-B: BALLY TO FURNISH (1) 36" X 78" LEFT HINGED SWINGING JAMOCLEAR JAMSON DOOR. DOOR INSTALLATION BY OTHERS. BALLY TO FURNISH (1) FLUSH MOUNTED LIGHT SWITCH ON EXTERIOR WITH CONDUIT WITHIN THE VERTICAL PANEL EXTENDING FROM LIGHT SWITCH BOX TO THE LIGHT BASE, J-BOX & TO TOP EDGE OF PANEL. BALLY WILL ALSO FURNISH A CONDUIT EXTENSION WITH NIPPLE AND J-BOX LOOSE. ALL ADDITIONAL HOLES, SLEEVES, J-BOXES AND WIRES MUST BE FURNISHED BY OTHERS. ALL INSTALLATION BY OTHERS. SEE ELEVATION VIEW "E-1" FOR LOCATIONS.
- NOTE-C: BALLY TO FURNISH SOLID WOOD IN END OF CEILING PANEL FOR JAMSON DOOR INSTALLATION.
- NOTE: BALLY TO FURNISH S/S WIRE CANTILEVER SHELVES. 5-TIER, 21"-WIDE (AS SHOWN).
- NOTE: BALLY TO FURNISH (8) KASON 1810 L.E.D. LIGHTS. LIGHTS INSTALLED AND WIRED BY OTHERS.
- NOTE: BALLY TO FURNISH (2) 4-1/2" DIAMETER THERMOMETERS WITH 5' SENSORS.
- NOTE: BALLY TO FURNISH (1) MODULARM DATA HUB SYSTEM W/ PHONE DIALER. (SHIPPED LOOSE)

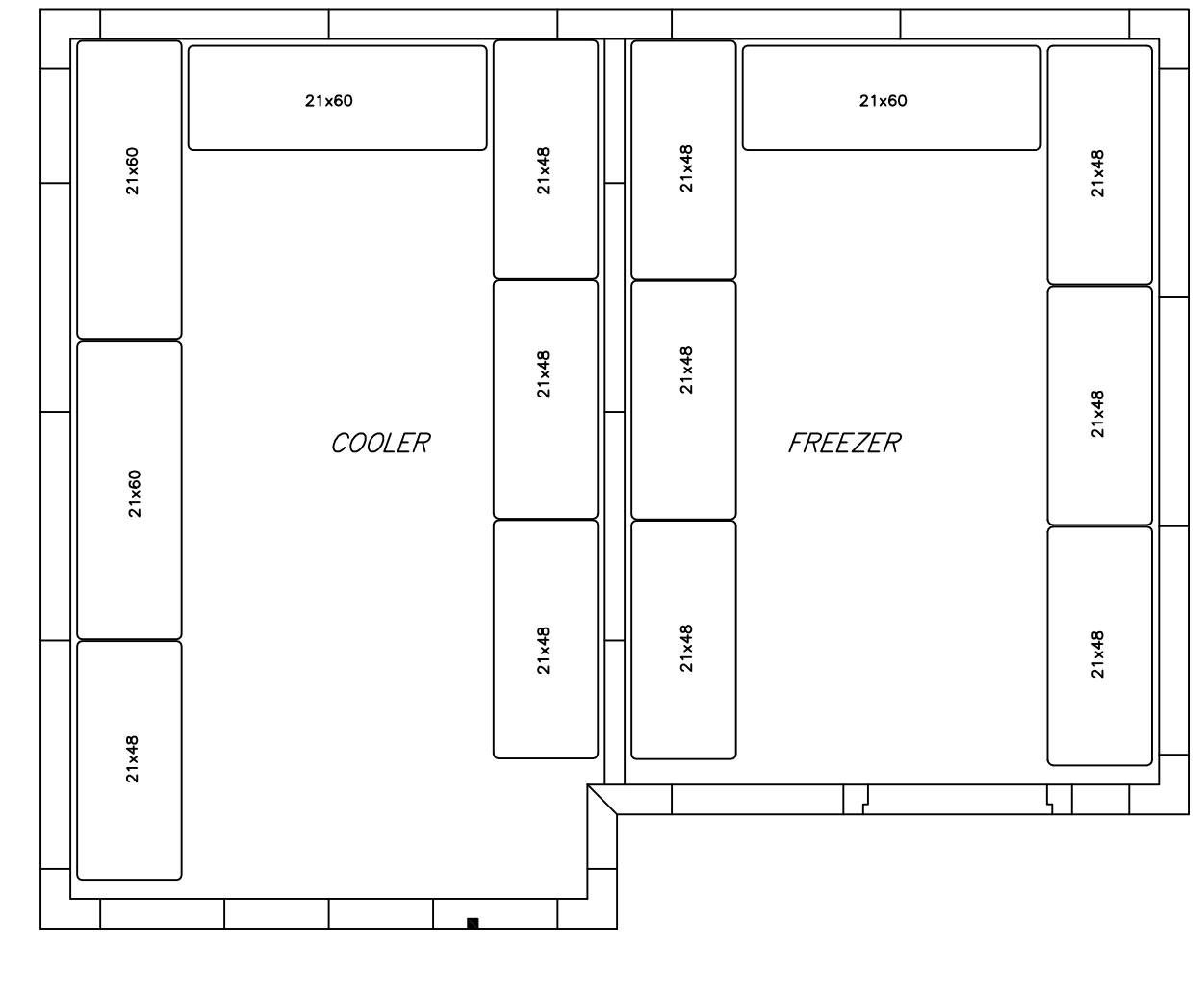


Ceiling & Vertical Layout

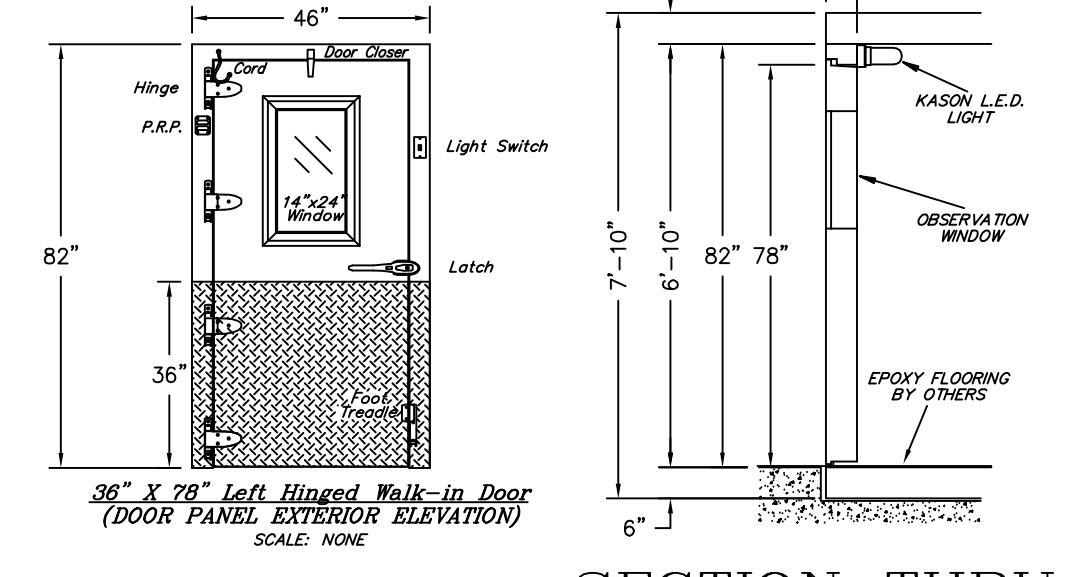
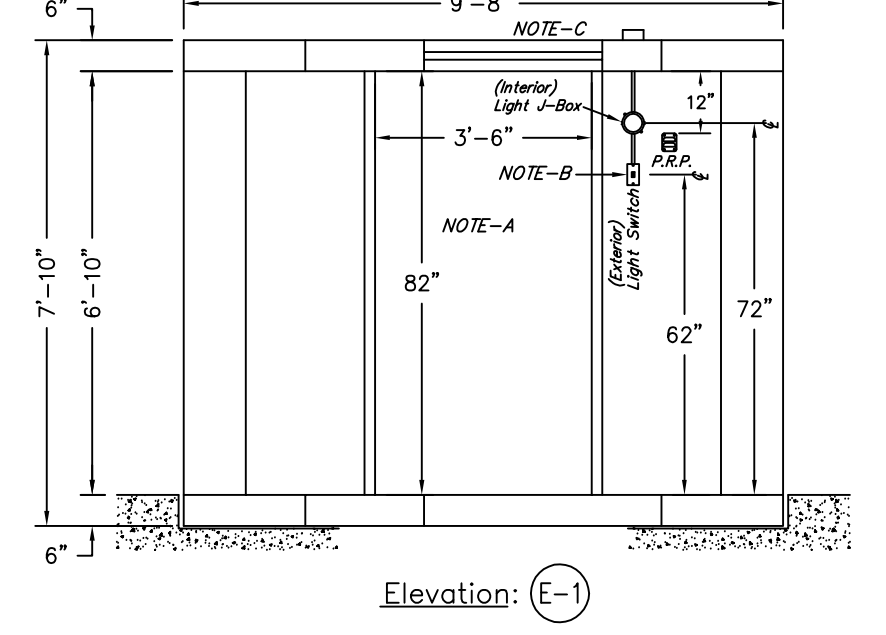
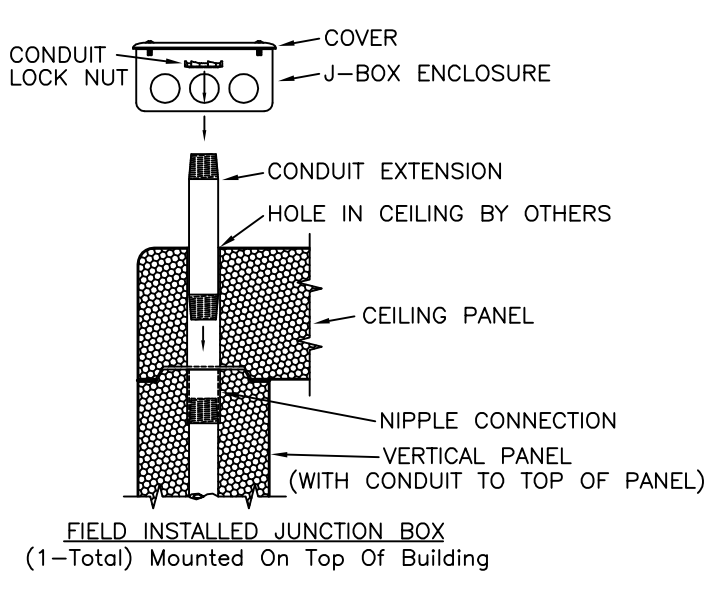


Floor Layout

PLAN VIEW-A
SCALE: 3/8" = 1' - 0"



Shelving Layout



SCALE: 1/2" = 1' - 0" SHEET 1 OF 1

VERTICAL PANEL LOCKING DIRECTION

BALLY FLOOR PANEL GUIDELINES

PREVENTING VAPOR LEAKS

DO NOT USE THIS DRAWING FOR INSTALLATION

EVERY SHIPPED ORDER WILL HAVE A FINALIZED "AS-BUILT" DRAWING.



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SIGNED APPROVAL

SIGNED _____

DATE _____

PLEASE READ

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REV	DESCRIPTION	DATE	BY
1	Revised Finish, Height, Opening Height, & Refrigeration	JMM 02/05/13	JMM
1	Revised Length, Added (1) MWF Opening, Light Switch, & Shelving	JMM 01/02/13	JMM

Bally REFRIGERATED BOXES, INC.

FOR **BANCROFT ES**
WILMINGTON, DE

DATE 10/26/12
DRAWN BY JMM
CHECKED BY JMS
PROJECT NUMBER 122723

REV.	REVISION DESCRIPTION	BY	DATE
2	UPDATED REFRIGERATION SHOP DRAWING	RMS	02.20.2013

EI ASSOCIATES
ARCHITECTURE - ENGINEERING
366 E. Main St., Suite 200 - Newark, DE 19711 - (302) 733-7555

PROJECT NO. PP7279
DRAWING NO. FS-16

ISSUE DATE FEB. 20 2013
REVISION 2



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